



Department of Energy

Washington, DC 20585

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MEMORANDUM FOR DISTRIBUTION

FROM:

MARK B. WHITAKER, JR.

DEPARTMENTAL REPRESENTATIVE TO THE DEFENSE
NUCLEAR FACILITIES SAFETY BOARD
OFFICE OF HEALTH, SAFETY AND SECURITY

SUBJECT:

Facility Representative Program Performance Indicators Quarterly
Report, July – September (3rd Quarter CY2007)

Attached is the Facility Representative (FR) Program Performance Indicators Quarterly Report covering the period from July to September 2007. Data for these indicators are gathered by Field elements quarterly per Department of Energy (DOE) STD-1063-2006, *Facility Representatives*, and reported to Headquarters program offices for evaluation and feedback to improve the FR Program. A summary of this quarter's data concluded:

- 82% Fully Qualified (last Quarter was 74%)
- 93% Staffing Level (last Quarter was 94%)
- 46% Time Spent in the Field (DOE goal is >40%)
- 73% Time Spent in Oversight Activities (DOE Goal is > 65%)

Percentages are based on FR staffing analyses at 203 Full Time Equivalents (FTEs) and 188.5 FTEs actual staffing. Fully qualified FR totals for this period broken down by program were as follows: EM had 89% fully qualified, NE had 91% fully qualified, NNSA had 68% fully qualified, and SC had 89% fully qualified. The DOE goal for fully qualified FRs is greater than 80%.

Current FR information and past quarterly performance indicator reports are accessible at the Facility Representative web site at <http://www.hss.doe.gov/deprep/facrep/>. Should you have any questions or comments on this report, please contact me or the DOE Facility Representative Program Manager, James Heffner at 202-586-3690.

Attachment



Facility Representative Program Performance Indicators Quarterly Report
November 28, 2007

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ENVIRONMENTAL MANAGEMENT SITES

Facility Representative Program Performance Indicators (3QCY2007)

<u>Field or Ops Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
CBFO	1	2	2	200	0	100	50	66	86
ID (ICP)	13	12	11	85	1	100	100	40	65
OR (EM)	19	17	16	84	0	94	88	47	71
ORP	14	14	14	100	0	100	93	46	74
PPPO	4	4	4	100	0	100	100	42	75
RL	19	19	19	100	0	100	95	73	69
SR	31	31	25	81	2	88	80	40	79
WVDP	2	2	2	100	0	100	100	43	65
EM Totals	103	101	93	90	3	96	89	50	73
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

* % Field Time is defined as the number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours is the actual number of hours a Facility Representative works in a calendar quarter, including overtime hours. It does not include leave time (sick, annual, or other) or holidays, nor does it include special assignments greater than 1 week assigned by the Field Element Manager.

** % Oversight Time includes % Field Time

EM Facility Representative (FR) Highlights:

- ID (ICP): During a maintenance monitor watch, a Waste Disposition Project FR identified several deficiencies with electrical motor maintenance prior to the start of work. The deficiencies were discussed with the Maintenance Manager and corrected prior to the start of work.
- ID (ICP): During the month of July, FRs observed that the contractor's response to two abnormal events was less than adequate, resulting in unnecessary delays in conducting fact finding meetings and event categorization. All of these events involved work that had been identified as "skill of the craft" by the Information Technology group, which neglected to account for hazards introduced by the environment in which the work was being performed. The FR insisted that the contractor conduct a more thorough investigation of the events from a work control process standpoint, where significant corrective actions were initiated.
- ID (ICP): Facilities and Material Disposition Project FRs identified weaknesses in the Contractor Assurance System elements of self assessment and issues management. Many of the contractor self-assessments did not appear to possess the depth of review necessary to encourage high performance levels or continuous improvement. Some of the issues identified were not documented in the company issues management database, and the extent of conditions for these issues often remains indeterminate. In some cases, corrective action development and implementation for significant issues have not been timely or comprehensive.
- ID (ICP): One FR transferred to a Senior NE FR position.
- OR (EM): FR participation assisted in the successful completion of the Molten Salt Reactor Experiment (MSRE) ORR. MSRE is moving towards heat up operations.
- OR (EM): Notable FR statistics include execution of 180 walkthroughs and/or assessments and review of 818 contractor documents.
- OR (EM): Four FRs completed full qualifications during this period. Additionally, four full-time FRs are now assigned to the MSRE.

- ORP: A FR found issues with the use of equipment spotters. The FR observed equipment movements were frequently performed without a spotter, hand signals were infrequently used and when used, often inconsistent with site hand signals. It was also observed when spotters were being used that the spotters were performing other activities, were facing away from the equipment, or were talking to other personnel about non-work related matters while equipment was moving.
- ORP: A FR found that a recent change to Occupational Safety and Health Administration regulations that requires the disconnecting means for motors and appliances to be capable of accepting a lock had not been implemented.
- ORP: A FR found that the Job Hazard Analysis (JHA) process was not effective at communicating and implementing the worker hazard awareness. Specifically, the JHA program did not increase worker awareness of hazards nor was the JHA being used to reduce risk by the workers.
- ORP: While touring the site, a FR observed conditions where cleanliness controls were not maintained and resulted in significant corrosion to a Fire Water System valve's internals. The condition became apparent when a pipe spool was removed for modifications. The Contractor was notified about this condition and issued a Construction Deficiency Report (CDR). The valve was subsequently removed and replaced with another valve and the CDR was cleared.
- PPPO: A FR participated on a Type B Accident Investigation (AI) Team for the July 12, 2007 accident, when a DOE Contractor employee was struck by a forklift. The AI Team activities began on August 21, 2007, and continued through the end of the quarter.
- RL: A FR provided oversight for K Basin Driver Mock-ups and provided review during document development leading to multiple safety and operational performance improvements.
- RL: FRs performed eight core surveillances at various Project Hanford Management Contract (PHMC) projects/facilities to evaluate the effectiveness of the contractors Lockout/Tagout (LOTO) activities for electrical work. In addition, River Corridor Project (RCP) FRs performed a RCP project wide surveillance covering Work Planning and LOTO.
- RL: The LOTO core surveillance for PHMC produced 15 Findings, 11 Observations, and two Good Practices. The Work Planning and LOTO core surveillance for RCP produced four Findings and five Observations. A total of 953 Operational Awareness (OA) reports were submitted and included 50 Findings, 171 Observations, and 11 Good Practices.
- RL: Two FR Team Leads (TLs) rotated the duty of Operations Oversight Division Director. The TLs are included in the FR oversight statistics/performance indicators reflecting their half-time TL and PM assignments.
- SR: Office of Assistant Manager for Waste Disposition (AMWDP) FRs hosted a visit by DOE Office of River Protection Hanford Tank Farms personnel to share Lessons Learned involving the recent Hanford Tank Farm transfer event.
- SR: An AMWDP FR performed an Occurrence Reporting and Processing System (ORPS) assessment for DOE Office of River Protection.
- SR: Office of Assistant Manager for Nuclear Materials Stabilization Project (AMNMSP) H-Area FRs provided oversight for the resumption of processing activities, for H-Canyon and HB-Line, following a safety pause implemented by the contractor management (due to numerous CONOPS issues). FRs also provided input and feedback to their management control plan to resume operations.

- SR: AMNMSP H-Area FRs provided oversight of the Facility Self Assessment (FSA) for processing of plutonium and beryllium metals.
- SR: AMNMSP H-Canyon FRs provided oversight of dissolver proficiency cold runs prior to the start of the plutonium and beryllium metals Facility Self Assessment.
- SR: One FR in AMNMSP re-qualified in the SRNL & CLAB laboratory facilities. Three FRs (2 in AMNMSP and 1 in Manager's Office) re-qualified in H-Canyon. One FR in the Office of Assistant Manager for Closure Project (AMCP) completed a 90-day training detail in H-Canyon (SR). In addition one FR retired and one FR resigned at SR during this period.
- WVDP: A FR prepared and presented lessons learned regarding Fork Truck Safety at the EM FR Summit held at the Savannah River Site in August.
- WVDP: FRs monitored and reported on contractor activities during the September Contract transition period; evaluated contract deliverables; and ensured weekly Work Review Group meetings were re-instated after a long hiatus to incorporate the proper hazards identification and hazards mitigation in work documents.

NUCLEAR ENERGY, SCIENCE, AND TECHNOLOGY

Facility Representative Program Performance Indicators (3QCY2007)

<u>Field or Ops Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
ID (NE)	11	11	11	100	1	100	91	43	77
NE Totals	11	11	11	100	1	100	91	43	77
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

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** % Oversight Time includes % Field Time

NE Facility Representative (FR) Highlights:

- ID (NE): During a documentation review at the Reactor Technology Complex (RTC), the FR noted a Nuclear Instrument had been declared inoperable due to excessive noise. DOE was not informed of this deficiency, and performance degradation of this Safety Class System had not been reported in ORPS as required. The FR addressed this with the Operations Manager who took action to report the issue.
- ID (NE): During a review of Industrial Hazard Reviews (IHR), a FR noted that the IHR for General Purpose Analytical Chemistry at RTC contained wording that unbounded the scope of the work thus undermining the effectiveness of the work management process. The contractor is taking action to revise the IHRs as appropriate.
- ID (NE): During a walkdown, two FRs noted a Radioactive Material Area (RMA) was not maintained in accordance with the INL Radiological Controls Manual. The RMA contained: radioactive material with labels that were not legible; posting signs detached and laying on the ground; inadequate area boundaries, and non-radioactive material commingled with radioactive material. Action was taken to correct the deficiencies.
- ID (NE): While touring Test Area North, a FR noted electrical maintenance activities (troubleshooting) being conducted on a material storage de-stacker control cabinet without wearing electrical safety gloves. The FR notified the Shift Assistant of the concern resulting in the activity being secured until appropriate PPE was acquired.

NATIONAL NUCLEAR SECURITY ADMINISTRATION SITES

Facility Representative Program Performance Indicators (3QCY2007)

<u>Site Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
LASO	11	11	10	91	0	90	60	36	62
LSO	10	11	11	110	0	91	45	51	71
NSO	10	10	7	70	1	86	86	53	69
PXSO	10	11	11	110	0	91	55	41	73
SRSO	4	4	4	100	0	75	50	50	91
SSO	11	11	11	100	0	91	91	37	70
YSO	12	12	12	100	0	100	83	43	73
NNSA Totals	68	70	66	97	1	91	68	43	71
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

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** % Oversight Time includes % Field Time

NNSA Facility Representative (FR) Highlights:

- LASO: A FR noted that the noise produced by impact wrenches when workers removed/installed bolts on SWBs in TA-54-231 was very high. The IWD for the observed work scope did not require hearing protection, nor was it readily available to workers on an optional basis. The FR interviewed TA-54 industrial hygienists to determine why hearing protection was not required and discovered that sound level monitoring in TA-54 is not routinely performed. As a result LANS TA-54 management established a noise monitoring/abatement program and will make hearing protection equipment available to workers.
- LASO: A FR persuaded LANS management to dry run LCO exit activities in TA-54-231. A dry run was advisable since the work scope was performed in accordance with hastily developed steps in an IWD rather than a stand alone procedure. The work scope had never been performed prior to the dry run. The dry run ensured that workers were able to successfully and safely execute the work scope.
- LASO: A Future Leaders Program participant converted to FR status in July. Based on high performance, a FR was selected for a one year assignment in the office of the Under Secretary of Energy, with responsibility for Field Management Council planning and participation in Department-wide management challenges. An application review is in progress to fill the 11th authorized slot.
- LASO: FRs participated in the Waste Characterization, Reduction and Repackaging Facility (WCRRF) ORR, and provided oversight of high activity drums processed at WCRRF.
- LSO: A FR observed a worker conducting a laser experiment without safety glasses. While the laser was operating, the FR noticed an opening to the enclosure that covered a Class B laser. The FR discussed this issue with the contractor and contractor's supervisor, which resulted in the supervisor stopping the work.
- LSO: Four FRs completed their FR re-qualifications, and an additional FR was hired.
- NSO: One FR completed final qualifications, bringing the total of fully qualified FRs at the NSO to 6. The 7th FR recently graduated from the Future Leaders Program and is scheduled to complete Core qualifications during 1st Quarter 2008.

- NSO: One FR was selected to fill an Excepted Service vacancy at the Nevada Site Office (NSO) outside the FR program. This action resulted in the attrition of 1 FR from the NSO FR cadre. NSO is working with the NNSA Service Center to recruit and fill the resulting vacancy. NSO has an approved compensatory action plan in place to provide FR coverage at the affected facility.
- PXSO: FRs supported two RA's at Pantex during the quarter.
- PXSO: One individual became part of the Pantex FR Staff after graduation from the Future Leader Program. Additionally, she completed her Phase I FR exam.
- PXSO: Provided one individual to support the Los Alamos WCRR Facility NNSA ORR.
- SRSO: A FR served in the role of subject matter expert for NNSA when problems were identified with the Tritium Extraction Facility ventilation control system.
- SRSO: FRs performed continuous coverage of Tritium facility operations and assessed the effectiveness of the contractor's Senior Supervisory Watch, which was implemented to improve conduct of operations performance.
- SSO: The Annular Core Research Reactor (ACRR) FR reviewed 22 procedure changes required to implement the upgraded ACRR TSR's. An Implementation Matrix was developed to map each TSR requirement through design features to the procedure implementing the requirement.
- SSO: The ACRR FR attended the annual Training, Research, and Test Reactor (TRTR) conference in Lincoln City, Oregon
- SSO: The Sandia Pulsed Reactor (SPR) FR provided 100% Oversight during the SPR-II Control Rod and Spare Fuel Plate packaging activities, and the SPR-II and SPR-III Core Disassembly and Fuel Plate packaging activities for transportation. The FR provided an Observation Report documenting material dose rates, shipping container dose rates with installed material, mapping of material identification number with shipping container serial number, and 95 photographs of each piece as it was placed into individual transportation containers.
- SSO: The SPR FR provided significant Oversight during Sodium Debris Bed Package removal from the Dense Pack, placement of these packages in NAC shipping containers, and subsequent welding/NDT activities.
- YSO: A FR assisted Oak Ridge Operations in the conduct of the Molten Salt Reactor Experiment ORR. The ORR was conducted to assure that the M&O contractor Bechtel Jacobs was prepared to resume fuel extraction operations.
- YSO: A FR provided oversight and review of a BWXT Y-12 investigation of an accident at the highly enriched uranium manufacturing facility construction site, where a worker fell while inappropriately using fall protection. Timely response and follow up investigation by the FR enabled him to brief site office management and help them diffuse a situation that was developing due to growing misinformation.
- YSO: A FR worked with the FR Program Manager and other FRs to draft guidance for incorporation into the FR Standard detailing use of FRs in projects.
- YSO: Several FRs performed oversight during Start-up of the 9215 enriched uranium rolling and forming equipment including oversight during first-use evolutions. The equipment had not been operated in over five years. First-use evolutions were completed in mid-August 2007, after more than 18 months of work.

OFFICE OF SCIENCE SITES

Facility Representative Program Performance Indicators (3QCY2007)

<u>Area/Site Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
AMES	1	1	1	100	0	100	100	26	80
ASO	5	5	5	100	0	100	100	23	73
BHSO	6	6	5	83	1	100	60	42	88
FSO	2	2	2	100	0	100	100	39	86
OR (SC)	5	5	4	80	1	100	100	40	69
PNSO	2	1.5	1.5	75	0	100	100	42	78
SC Totals	21	20.5	18.5	88	2	100	89	35	78
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

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** % Oversight Time includes % Field Time

SC Facility Representative (FR) Highlights:

- BHSO: One FR detailed at HQ for a year returned to BHSO to a non FR position resulting in a staff decrease of one.
- BHSO: Several FRs were involved with responding to a widespread Operational Emergency in July due to flooding of facilities and wetting equipment caused by very heavy rains.
- BHSO: Two FRs reviewed the contractor request and actions necessary to downgrade the Waste Management Facility from a Category 3 nuclear facility to below a Category 3 radiological facility.
- FSO: FRs were involved in numerous safety activities and initiatives including coordination of the SC Accelerator Safety Workshop, participation in the Accelerator Shutdown activities, and involvement in the SCMS procedure development.
- OR (SC): Continued emphasis was placed on post restart activities at the High Flux Isotope Reactor (HFIR), operational activities at the Non-Reactor Nuclear Facilities, and ORNL Accelerator Facilities.
- OR (SC): The attrition of one FR during this period was due to voluntary retirement. Efforts are in progress for filling the position. Additionally, tri-annual re-qualification was successfully completed by one FR assigned to HFIR.
- PNSO: A FR discovered a security door to a material balance area (MBA) in the Radiochemical Processing Lab (RPL), a hazard category 2 nuclear facility, blocked open, with no one in the vicinity.
- PNSO: A FR monitored construction activities including the excavation of the four buildings comprising the Physical Science Facility (PSF), the renovation of the Environmental Molecular Science Lab (EMSL) electrical system, and the construction of the EMSL office addition.

- PNSO: FRs completed surveillances of hazardous energy control lockout and tagout (LOTO) in Laboratory operated 300 Area facilities. Coincident timing allowed for breadth of potential issues to be readily apparent and resulted in the formal request for a contractor corrective action plan to end the practice of using hazardous energy LOTO for preservation of equipment configuration. In addition, FRs discovered tagouts not specifying the equipment to be locked and tagged out of service, and the tagout logbook not being kept up to date.